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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/941,251
Filing Date: August 28, 2001
Appellant(s): BANERJEE ET AL.

Gerald H. Glanzman
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/21/2007 appealing from the Office action mailed 08/23/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5827070	Kershaw et al.	10-1998
5885087	Thomas	3-1999
5915973	Hoehn-Saric et al.	6-1999
6755661	Sugimoto	6-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

(A) Claims 1-3, 23-25, 28 and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661). In regards to claims 1, 3, 23, 25, 28 and 47, Thomas discloses a test timing system that discloses a computerized testing device that conducts testing for a user whereby a question is presented to the user and the time taken by the user to answer the question is tracked and displayed and may be compared to a predetermined time (2:5-20 and 4:45-65). Examiner contends that the constant display of the elapsed time constitutes an alert and that the predetermined time for a question used to compare to the elapsed time disclosed in the reference would constitute an alert threshold. Thomas further discloses that the system may be used to practice examination skills and improve their

test taking skills (3:4-14) and that the system maintains player profiles in order to provide a history of the user's progress including performance by subject or topic (7:43-58). Thomas lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert thresholds and that presentation of test questions are based on levels of difficulty of the test questions and the ability of the test taker.

In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user (9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (917-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) and a preset time limit for each question (6:63-40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing system in order to

further aid the test taker in completing the test in the allotted time while giving as much time as necessary to correctly answer questions and customize the tests presented to the user's ability.

In regards to claims 2, 24 and 48, Thomas discloses the system is a computer program on a computer (3:53-65).

(B) Claims 4-5, 26-27, 49 & 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) as applied to the claims above and further in view of admitted prior art.

In regards to claims 4, 5, 26, 27, 49 and 50, the billing for services rendered is regarded as old and well known in the art in view of the admitted prior art (see arguments).

(C) Claims 6, 12, 17-18, 29, 32-33, 35, 40-41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) and further in view of Hoehn-Saric et al. (US 5915973).

In regards to claims 6, 29, 32-33 and 46, Thomas in view of Sugimoto discloses the testing system described above for claim 1 where the system may operate over a network, which examiner is interpreting to be an interface, with a client (3:63-65). Thomas lacks in disclosing the use of instant messaging.

In related prior art, Hoehn-Saric teaches that the administrator of a test has great flexibility in sending and receiving messages associated with the administration of a test

including data based communications (3:64-4:3, 5:19-40, 7:7-13, 7:23-27, 9:18-24, and 10:42-48). This flexibility may include sending and responding to messages with the test product users as quickly as the physical interconnection is capable of processing and sending them, making them "instant messages". One skilled in the art would recognize the advantages of providing a messaging system that provides rapid communication in a timed testing situation.

Therefore, it would have been obvious to one of ordinary skill in the art to provide test examination system as disclosed by Thomas with messaging capability to take full advantage of the speed of the remote connection with the test product user to provide the ability to send and receive instant messages as taught by Hoehn-Saric for the purposes of distributing test evaluations to users in a more timely fashion in a time critical environment.

In regards to claims 12 and 35, Thomas discloses that the score for the test is stored in permanent storage (6:38-41).

In regards to claims 17 and 40, the combination discloses the system of claim 29 above where the alert of the elapsed time is constant and may be compared to a predetermined value (4:45-60). The system of Thomas displays the alert throughout the question but due to the nature of computing it would only be updated periodically as displays are not continuous.

In regards to claims 18 and 41, the combination made discloses that the question timing may be compared to predetermined data. Previous timing data for the same question would be an obvious type of data to use as a predetermined time to compare

the current time against, as that would be an indicator of past performance by test takers.

(D) Claims 7-8, 13, 16, 30-31, 36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) and Hoehn-Saric et al. (US 5915973) as applied to the claims above and further in view of admitted prior art.

In regards to claims 7-8 and 30-31, the billing for services rendered is regarded as old and well known in the art in view of the admitted prior art (see arguments).

In regards to claims 13 and 36, that test creators may be different entities than test administrators is regarded as old and well known in the art in view of the admitted prior art (see arguments).

In regards to claims 16 and 39, that payment for testing services would be based on the number of people taking a test is regarded as old and well known in the art in view of the admitted prior art (see arguments).

(E) Claims 14-15, 21-22, 37-38 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5885087) in view of Sugimoto (US 6755661) and Hoehn-Saric (US 5915973) as applied to claim 6 above, and further in view of Kershaw et al. (US 5827070).

In regards to claims 14 and 37, Thomas in view of Sugimoto and Hoehn-Saric discloses the combination as made for claims 6 and 29 above. Thomas further

discloses the maintenance of testing records and comparison to ideal timing values (6:37-50 and 4:53-60). The combination made lacks in disclosing session identification or proctor identification to match or deliver data.

In an analogous testing system, Kershaw discloses a the collection of statistical data on all examinees taking a certain test (2:8-16) as well as the recording of a test program id, registration id, test center id, and workstation id for each test taker in order to provide an audit trail (73:27-74:26). One skilled in the art would recognize the advantage of maintaining detailed records on test takers to provide accurate records to ensure that no cheating or errors occurred.

Therefore it would have been obvious to one skilled in the art at the time to combine the test administration system of Kershaw with the timing and messaging system made from the combination made for claim 6 to provide a test timing system for a number of users while maintaining accurate and detailed records of the test takers.

In regards to claims 15 and 38, the combination made above for claim 14 discloses the tracking of workstation and test id for each test taker. The combination made lacks in explicitly stating that the timing data is sent to the proctoring device based on a proctor id. However, it would have been obvious to base the sending of timing data on proctor id as testing centers commonly provide multiple tests simultaneously and the individual proctors would only need the timing data for the tests they are monitoring thus reducing the data traffic overhead.

In regards to claims 21 and 44 and 22 and 45, the combination made above for claims 19 and 42 and 6 and 29 respectively discloses the retention of records to predict

test taker performance. The combination made lacks in disclosing that the information would be used in future tests.

In an analogous testing system, Kershaw discloses the retention of testing data for the creation of future tests (2:8-16). One skilled in the art would recognize the advantage of using the elapsed time of particular test questions in addition to the answers given in determining the difficulty of a question.

Therefore it would have been obvious to one skilled in the art at the time to combine the test question timing data of the combination of Thomas and Sugimoto with the analysis of test data presented in Kershaw in order to better determine and tune the difficulty of standardized tests.

(F) Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kershaw in view of Thomas (US 5885087), Hoehn-Saric (US 5915973) and Sugimoto (US 6755661).

Kershaw discloses a test administration system that records statistical data about test takers and identification system about each test taker (2:8-16 and 4:3-5:2). Data recorded includes session identification, test identification with several tests listed suggesting the capability for multiple tests to be presented by the system (73:35-74:27). While Kershaw does track test results for the creation of performance statistics, it lacks in explicitly stating the tracking of question timing data or instant messaging.

In analogous testing system, Thomas discloses the tracking of question timing data and the comparison to predetermined time data (2:5-20 and 4:45-65). One skilled

in the art would recognize the advantage of including time data in the statistics gathered by Kershaw in order to more accurately determine overall difficulty of a question as well as the notification feature in order to provide to the test takers time indication as standardized tests are time limited and keeping track of user's time is very important (4:49-51).

In an analogous test administration system, Hoehn-Saric discloses that the administrator of a test has great flexibility in sending and receiving messages associated with the administration of a test including data based communications (3:64-4:3, 5:19-40, 7:7-13, 7:23-27, 9:18-24, and 10:42-48). This flexibility may include sending and responding to messages with the test product users as quickly as the physical interconnection is capable of processing and sending them, making them "instant messages".

All of the component parts are known in Kershaw, Thomas and Hoehn-Saric. The only difference is the combination of the "old elements" into a single system by including the component parts in a single administrative system.

Thus it would have been obvious to one having ordinary skill in the art to include the instant messaging taught by Hoehn-Saric and the test question timing of Thomas with the test administration system of Kershaw, since the operation of the instant messaging and the question timing is not dependant on the operation of the test administration system and the other components could be used in combination with a test administration system to achieve the predictable results of a test administration system with test timing and instant messaging.

The combination made lacks explicitly disclosing that the alert schedule is based on the profile of the user's previous performance, the relative question difficulty, and alert thresholds and that presentation of test questions is based on levels of difficulty of the test questions and the ability of the test taker.

In related prior art, Sugimoto discloses a testing system that adapts the timing of a test question when a user takes less than an allotted time on a question and provides the extra time on a later question for the user (abstract and 18:48-54). Sugimoto further discloses that profiles of the test taker are maintained, including skill level of the user (9:5-7 and fig 9, user ID and skill code), and the profile is used to determine questions presented to the test taker (917-20), a question database that includes information on the question difficulty to be related to the user's skill setting (6:5-7) and a preset time limit for each question (6:63-40), which examiner contends is analogous to an alert threshold, that is changed by the system as the user's skill is determined. One skilled in the art would recognize the advantages of providing more time on questions a user has trouble with and less time on questions the user finds easy in order to complete an exam in the allotted time with the most correct answers possible thus improving the test taker's performance and tailoring a test to a user's ability in order to help them improve incrementally.

Therefore it would have been obvious to one skilled in the art at the time to have modified Thomas in view of Sugimoto to include the adaptive timing system in order to further aid the test taker in completing the test in the allotted time while giving as much

time as necessary to correctly answer questions and customize the tests presented to the user's ability.

(10) Response to Argument

Appellant argues that Thomas does not teach "generating an alert after the test question timing data exceeds a threshold while continuing to present the question". Thomas discloses providing a question timer displaying the duration of time taken on a particular question and further states that a predetermined time, or threshold, may be used as comparison (2:10-20). Examiner contends that by displaying a current time compared to a predetermined time for a test question the test taker would be provided with an alert when the test question duration had exceeded the predetermined time by comparison of the two times in the display. Furthermore, Thomas also discloses that display symbols such as a digital stopwatch, bar graph, or some other graphical technique could be displayed to represent elapsed question time in order to aid a test taker in improving their time performance for a question (4:45-60). Examiner asserts that each of these suggests providing information or alerts to users that they are taking longer than predetermined duration of time or a threshold. Thomas also discloses that audio signals may be used to inform test takers of their performance with respect to a predetermined time amount (4:56-61). Examiner again asserts that this is a suggestion of providing an alert to a test taker with respect to a threshold.

Appellant further argues that Thomas does not teach or suggest "where the alert is generated based on an alert schedule for the test question, wherein the alert

schedule is generated for the test taker based on a customized alert profile for the test taker, and wherein the customized alert profile includes previous performance information of the test taker, information to associate a level of difficulty of a particular test question with a capability category of the test taker to answer the particular test question, and alert thresholds for the test questions." As examiner stated in the rejection, Thomas discloses that the system maintains test taker profiles in order to provide a history of the user's progress including performance by subject or topic, but does not teach adaptive timing based on the test taker's performance and question difficulty. Sugimoto discloses the adaptive test taking system where questions are timed and the predetermined time or threshold for a test taker is adapted based on the test taker's performance and the question difficulty. The combination of the two references would have provided to one skilled in the art at the time with teaching and motivation to adapt the predetermined time duration or threshold of Thomas with the adaptive test timing of Sugimoto because different test takers have different abilities and providing more time to a question difficult to a test taker and less on a question easy for the test taker would achieve the goal of getting the most questions on a test correct in the time provided for the test. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Appellant argues that Hoehn-Saric fails to teach or suggest that "said remotely located user can send an instant message to and receive an instant message from said

proctor device and wherein said proctor device can send an instant message to and receive an instant message from a plurality of remotely located users, and wherein instant messages are used to communicate and clarify test question wording details, test instructions, and test question timing data during the test." Hoehn-Saric discloses that the test taker and the central office may be in communication to allow two-way communication between the parties during the course of the test (9:18-24) and further discloses that the communication method may be data, voice, or two way video (7:23-27). Examiner asserts that this is a teaching of instant messaging as rapid two-way communication is the reasonable interpretation of the term "instant messaging" and any of the methods taught by Hoehn-Saric would inherently be a rapid system as all of the methods are limited in speed only by their transmission medium and not by any design or intended functionality.

Appellant argues that Hoehn-Saric does not teach or suggest monitoring test question timing by a proctor device by a test administration system. Hoehn-Saric discloses a test administration system where a central office monitors all aspects of a test taker at a remote location including test responses and test taker requests. Hoehn-Saric therefor teaches the monitoring of test data which would include test question timing when used in combination with the teachings of Thomas and Sugimoto.

Appellant argues that Kershaw, Thomas, Sugimoto, and Hoehn-Saric do not teach or suggest "storing a response to the test question from the remotely located user to update the customized alert profile for use in future tests." Kershaw teaches that test providers may record statistical information in regards to each question on a test for the

creation of future tests. This is a teaching of using previous test taking data in order to prepare for future tests. As detailed above, the intention of the Thomas reference is the preparation of test takers for future tests, and the teachings of Kershaw would suggest to one skilled in the art to use the test timing data of previous tests to prepare for future tests.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

David W. Duffy

/David W Duffy/

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